

INTERNATIONAL STANDARD

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Paints and varnishes — Determination of through-dry state and through-dry time — Method of test

*Peintures et vernis — Détermination du séchage à cœur et du temps de
séchage à cœur — Méthode d'essai*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 9117 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*.

Annex A forms an integral part of this International Standard.

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Paints and varnishes — Determination of through-dry state and through-dry time — Method of test

1 Scope

This International Standard is one of a series of standards dealing with the sampling and testing of paints, varnishes and related products.

It specifies a test method for determining under standard conditions whether a single coat or a multi-coat system of paint or related material has, after a specified drying period, reached the through-dry state, i.e. a pass/fail test. The test procedure may also be used to determine the time taken to achieve that state.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 48:1979, *Vulcanized rubbers — Determination of hardness (Hardness between 30 and 85 IRHD)*.

ISO 1512:1974, *Paints and varnishes — Sampling*.

ISO 1513:1980, *Paints and varnishes — Examination and preparation of samples for testing*.

ISO 1514:1984, *Paints and varnishes — Standard panels for testing*.

ISO 2808:1974, *Paints and varnishes — Determination of film thickness*.

ISO 3270:1984, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing*.

ISO 3678:1976, *Paints and varnishes — Print-free test*.

ISO 4622:1980, *Paints and varnishes — Pressure test for stackability*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 through-dry state: The condition of a film in which it is dry throughout its thickness as opposed to that condition in which the surface of the film is dry but the bulk of the coating is still mobile. For the purposes of this International Standard, a single coating or a multi-coat system of paint or varnish or related material is considered to be through-dry when a specified gauze under specified pressure, torsion and time does not mark or damage the film.

3.2 through-dry time: The period of time between the application of a coat to a prepared test panel and the achievement of the through-dry state, as determined by the specified test procedure.

4 Required supplementary information

For any particular application, the test method specified in this International Standard needs to be completed by supplementary information. The items of supplementary information are given in annex A.

5 Principle

Application, to a substrate, of a coat of agreed thickness which is allowed to dry under specified conditions. Determination of the completeness of drying throughout the coat by examination of the surface of the coat after the application of a load, applied over a given area of the surface, and subsequent rotation of the load-applying face through 90°.